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PATENT APPLICATION

Docket No.: 14917.1.1

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In application of

James E. Moon, et al.

Serial No.: 09/698,329

Filed: October 27, 2000

For: INTEGRATED MONOLITHIC  
MICROFABRICATED ELECTROSPRAY AND  
LIQUID CHROMATOGRAPHY SYSTEM  
AND METHOD

### TRANSMITTAL FOR INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Transmitted herewith for filing and pursuant to 37 C.F.R. § 1.97 is an Information Disclosure Statement.

Enclosed also are the following designated documents, as required under 37 C.F.R. §§ 1.97 and 1.98:

  x   Form PTO-1449 list of eighteen (18) references submitted for consideration.

       Legible copies of the listed references or their relevant portions.

  x   All English translations of each nonenglish reference, if any, within the possession, custody, control or availability of anyone designated in 37 C.F.R. § 1.56(c) (see 37 C.F.R. § 1.98(c)).

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The following are included within the Information Disclosure Statement if applicable and as required under 37 C.F.R. § 1.98:

- \_\_\_ Concise explanation of relevance of each reference not in English and unaccompanied by an English translation.
- \_\_\_ Statement that certain listed references not enclosed are substantially cumulative of an enclosed reference.
- x   Statement that certain listed references not enclosed were previously cited by or submitted to the Office in the identified prior application which is relied upon for an earlier filing date under 35 U.S.C. § 120.

In order to secure consideration of the items designated above, one or more of the following, if required, is also enclosed:

- \_\_\_ Promptness Certification.
- \_\_\_ Check No. \_\_\_\_\_ in the amount of \$240.00 constituting submission fee under 37 C.F.R. 1.17(p);
- \_\_\_ Petition for Consideration and Check No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_.
- \_\_\_ In the event that 37 C.F.R. § 1.97(c) applies and the Examiner is not satisfied that the Promptness Certification meets the requirements of 37 C.F.R. § 1.97(e), or in any other event remediable by a fee, please credit any over payment or charge any additional fees to Deposit Account No. 23-3178 of the undersigned.

Dated this 16<sup>th</sup> day of November, 2000.

Respectfully submitted,

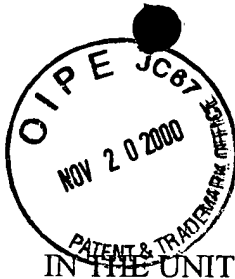


David O. Seeley  
Attorney for Applicants  
Registration No. 30,148



**022913**

PATENT TRADEMARK OFFICE



PATENT APPLICATION  
Docket No.: 14917.1.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of )  
 )  
James E. Moon, et al. )  
 )  
Serial No.: 09/698,329 )  
 )  
Filed: October 27, 2000 ) Art Unit  
 ) 1741  
 )  
For: INTEGRATED MONOLITHIC )  
 )  
MICROFABRICATED ELECTROSPRAY AND )  
 )  
LIQUID CHROMATOGRAPHY SYSTEM )  
 )  
AND METHOD )  
 )

CERTIFICATE OF DEPOSIT UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on November 16, 2000.

David O. Seeley  
Attorney for Applicants  
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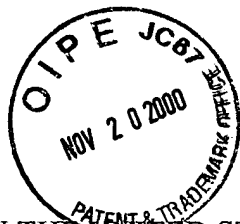
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Transmitted: Transmittal for Information  
Disclosure Statement  
Information Disclosure Statement  
Form PTO-1449 Listing of All References  
Legible Copies of All Listed References  
Certificate of Deposit  
Postcard

Docket: 14917.1.1

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PATENT APPLICATION

Docket No.: 14917.1.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

James E. Moon, et al.

Serial No.: 09/698,329

Filed: October 27, 2000

For: INTEGRATED MONOLITHIC  
MICROFABRICATED ELECTROSPRAY AND  
LIQUID CHROMATOGRAPHY SYSTEM  
AND METHOD

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INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. § 1.97

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Please find, pursuant to 37 C.F.R. § 1.98(a)(1), the enclosed Form PTO-1449 which contains a list of all patents, publications, or other items that have come to the attention of one or more of the individuals designated in 37 C.F.R. § 1.56(c). While no representation is made that any of these references may be "prior art" within the meaning of that term under 35 U.S.C. §§ 102 or 103, the enclosed list of references is disclosed so as to fully comply with the duty of disclosure set forth in 37 C.F.R. § 1.56.

Moreover, while no representation is made that a specific search of office files or patent office records has been conducted or that no better art exists, the undersigned attorney of record

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believes that the enclosed art is the closest to the claimed invention (taken in its entirety) of which the undersigned is presently aware, and no art which is closer to the claimed invention (taken in its entirety) has been knowingly withheld.

In accordance with 37 C.F.R. §§ 1.97 and 1.98, a copy of each of the listed references or relevant portion thereof is also enclosed.

In accordance with 37 C.F.R. § 1.98(c), all English translations within the possession, custody, control or availability of anyone designated in 37 C.F.R. § 1.56(c) of each nonenglish reference, if any, are also enclosed.

Statement of Relevance of References Listed  
Unaccompanied by English Translation  
Under 37 C.F.R. § 1.98(a)(3)

Since all listed references are either in the English language or are accompanied by a translation into English, no concise explanation of relevance is required under 37 C.F.R. § 1.98(a)(3).

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Statement of References Previously Disclosed  
Under 37 C.F.R. § 1.98(d)

The following listed references are not enclosed because, under 37 C.F.R. § 1.98(d), they were previously cited by or submitted to the Office in application number 09/156,507, filed September 17, 1998, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

U.S. Patent Documents

<u>Patent Number</u>	<u>Issue Date</u>	<u>Name</u>	<u>Class</u>	<u>Sub Class</u>	<u>Filing Date</u>
4,842,701	06/27/89	Smith, et al.	204	180.1	04/06/87
5,182,366	01/26/93	Huebner, et al.	530	334	05/15/90
5,641,400	06/24/97	Kaltenbach, et al.	210	198.2	10/23/95

5,872,010	02/16/99	Karger, et al.	436	173	07/03/96
5,917,184	06/29/99	Carson, et al.	250	288	02/07/97
5,969,353	10/19/99	Hsieth	250	288	01/22/98
5,993,633	11/30/99	Smith, et al.	204	601	07/31/97
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David P. H. Smith, "*The Electrohydrodynamic Atomization of Liquids*," IEEE Transactions on Industry Applications, Vol. IA-22, No. 3, p. 527-535, May-June, 1986

Stephen C. Jacobson; Roland Hergenröder; Lance B. Koutny; and, J. Michael Ramsey, "*High-Speed Separations on a Microchip*," Anal. Chem., April 1, 1994, 66, 1114-1118

Stephen C. Jacobson; Roland Hergenröder; Lance B. Koutny; and, J. Michael Ramsey, "*Open Channel Electrochromatography on a Microchip*," Anal. Chem. 1994, 66, 2369-2373

D. Jed Harrison; Karl Fluri; Kurt Seiler; Zhonghui Fan; Carlo S. Effenhauser; and, Andreas Manz, "*Micromachining a Miniaturized Capillary Electrophoresis-Based Chemical Analysis System on a Chip*," Science, Vol. 261, August 1993, 895-897

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Matthias Wilm and Matthias Mann, "*Analytical Properties of the Nanoelectrospray Ion Source*," Analytical Chemistry, Vol. 68, No. 1, January 1, 1996, p. 1-8

Qifeng Xue; Frantisek Foret; Yuriy M. Dunayevskiy; Paul M. Zavracky; Nicol E. McGruer; and, Barry L. Karger, "*Multichannel Microchip Electrospray Mass Spectrometry*," Analytical Chemistry, Vol. 69, No. 3, February 1, 1997, p. 426-430

Malcolm Dole; L.L. Mack; R.L. Hixes; R.C. Mobley; L.D. Ferguson; and, M.B. Alice,  
"Molecular Beams of Macroions," The Journal of Chemical Physics, Volume 49, Number 5,  
September 1, 1968, p. 2240-2249

Masamichi Yamashita and John B. Fenn, Journal of Chemical Physics, Volume 88, 1984,  
p. 4451-4459

Please credit any over payment or charge any additional fees to Deposit Account No. 23-3178  
of the undersigned.

Dated this 16<sup>th</sup> day of November, 2000.

Respectfully submitted,



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